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remove their bark-cloth bands, take to the water and swim over, holding spear, shield, string bag, and bark-cloth band above their heads. A man may take a short length of light wood for a lifebuoy and, launching himself into the rapids of the Kumusi, will disappear and reappear many times, in a way which may actually alarm the spectator, until he emerges on the opposite bank some hundreds of yards down stream.

Rafts. Along the upper reaches of the rivers canoes are seldom seen. A primitive raft (*enga*) is constructed of half a dozen logs with two cross-pieces. Underneath are placed one or two much larger logs, which, though quite unattached, remain in position and buoy the raft upwards. An even cruder makeshift is an *enga* of banana stalks.

This primitive device, the raft, continues to hold its place with the canoe. Although essentially temporary it is strongly made. There is a tale of a crocodile-man who in his human guise persuaded two youths to build a raft, instructing them particularly to use grass in the building of it. He then volunteered to swim underneath in order to buoy up the raft like one of the detached logs. But he had betrayed himself by a smile which revealed the long pointed teeth of a crocodile, and the boys, unknown to him, used cane and strong creeper in binding the logs together. Then follows the sequel in which the swimmer, transmogrified into a crocodile, heaves and lashes his tail to no effect, thus pointing to the necessity of making a strong job even of an *enga*. But, however well constructed, the raft remains an unstable craft, and in the main a temporary one. Being clumsy and unmanageable, it may be carried far down stream in transit, and it is easier to make another than to haul it back.

Canoes. The canoe (*ma*) is a hollowed log with a platform and an outrigger. The work of obtaining a suitable log and the rough hewing of it will call for the assistance of a man's fellow villagers, for which he makes them no reward except that of feeding them. After the initial stages he works leisurely at it himself; he gives a neat finish to the hewing with his adze (and sometimes still the old stone adze is preferred for canoe work); he fits the platform and outrigger;

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round about. Natives will ask you politely for an orange-pip when oranges come down from Kokoda with the mail, but I have never yet heard of an orange-tree successfully grown by a native.

Sometimes you may meet a man returning from a journey with a bundle of rooted saplings on his shoulder —bread-fruit or *Ajimo*, the bark-cloth tree—which he means to plant in his garden. Near Dobodura I have seen a plantation of young *Ajimo* trees—perhaps 500—about 10 feet high and somewhat densely planted. The native is prone to plant his trees too closely, especially coco-nut and betel palms. The latter may sometimes be seen in soldierly rows, so close together that a big man could scarcely pass between. On the site of a new village an energetic village constable had made his own plantation of coco-nuts, lined, spaced, and each protected by a little fence against the pigs. Everything reflected credit upon his observation of white men's methods except that his coco-nuts were not more than 12 feet apart.

(*d*) *Tending and Protecting.* While the taro are young they are kept fairly clear of weeds, but once they are fully established work grows slack and they are left to fight their own battle. Weeding, like most drudgery, is mainly woman's work. It is done principally by hand or by trade-knife, and the weeds are thrown aside or hung untidily on the tree-stumps. As there is no implement resembling a hoe, the soil loses the advantage of being tilled and weeded at one and the same time.

There are many degrees of tidiness and untidiness in native horticulture, and, as we have observed, the neglect of *kurokuro* grass is the most serious offence. But a weed-grown garden and its owner are objects of contempt. There is a tale (not wholly relevant but not to be spoiled by omitting the irrelevant) of a young bride, wooed by a ne'er-do-well youth and won by his false account of the large and well-kept garden which is to be hers. She consents to accompany him home and become his wife. Nearing his village they pass through broad expanses of

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flourishing taro with hardly a weed to be seen, and he points to this side and that, telling her that the gardens are his. Very well pleased with her prospects the girl goes out with her husband next morning to help him at his work. This time he takes her to his real garden, an overgrown neglected patch. Sadly disillusioned the poor girl says nothing but sits down to her weeding while her husband at a little distance does the same. Presently she pulls up a weed with a sound which causes her husband to think she has broken wind. He bursts into a loud guffaw, and the girl hangs her head in shame, thinking to herself, 'This new husband of mine is a brute as well as a liar.' After a moment's silence, while the man's back is turned, she takes a stone and flings it into the bush, crying excitedly, 'Look, a wallaby!' He notices the disturbance in the brushwood caused by the falling stone, seizes his spear and dashes off in pursuit, while the girl, taking advantage of his preoccupation, dashes off in the opposite direction to her village, where, to point the moral and make a happy ending, she subsequently marries another.

The native realizes that too great a proportion of the plant's vitality may go into its leaves, and sometimes he will trim them. Before planting the offset the young leaves are invariably snipped off except for one or two. So also with the taro-top. The cook holds a large flat piece of oyster shell or coco-nut shell in the palm of her hand, and with a pushing motion neatly severs the taro-top at its base before proceeding to peel the taro. The stalk is trimmed to a length of six or seven inches, and the taro-top put aside for replanting. The edge of this peeling instrument is dangerously sharp in clumsy hands. The cuscus was once an old woman who sat peeling taro while a dance was in progress. But she kept her old eye fixed in admiration upon her son-in-law, the barnyard rooster, who with his splendid feathers made such a figure among the dancers; and thus, while her attention strayed, the taro-peeler slipped, and she became aware

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538 that she had cut her thumb off. At that she said, 'Now I am a cuscus,' and ever since the animal has been remarkable for the queer little member which so resembles a truncated human thumb.

244 Sometimes dying leaves are snipped off the growing
794 plant. In a ceremony of the new 'Taro cult' a band of
789 excited men were pushing their way through the taro gardens, headed by one or two leaders who continually sprayed the plants with medicine from their mouths, and here and there as they passed snapped off large leaves. The reason for this, as the leaders themselves explained the matter, was that, as with a fully grown taro the outer leaves fall, it would expedite this development to anticipate it, and make the leaves fall now.

244 I do not know of any other kind of trimming or pruning, save sometimes in the interests of tidiness. On the whole garden plants, large and small, are left very much to themselves. Some exception, however, is made in the [249] case of sugar-cane, the long stalks being bound together and supported by poles, lest they fall and so become a prey to rot and rat.

241 There seem, however, to be few recognized pests in the ordinary sense of the word; the principal enemies
136 of the native horticulturist are not microbes but animals, bats, and birds. He must be constantly on guard against the bush-pig and minor foes—the flying fox, the rat, the wallaby, and the cockatoo, not to mention his fellow [173] man. Formerly, in a kind of native Paradise where work was at a minimum, the bush-pig was content with bush food—roots and herbs and such-like. But exchanging confidences with the rat, he learnt that the latter's food was taro and succulent sugar-cane. After that he invaded the gardens, and it has been necessary ever since to build a fence.

417 The garden fence should properly surround the whole
241 group of clan gardens. It is built in sections, each man being responsible for the part nearest his own garden. But the work is rather laborious, and the gardens are

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adopted by all the Orokaiva, there appears to be hardly any special practice that could in any way benefit the taro crop. Nevertheless, despite certain very undesirable features, the Taro cult does no serious amount of harm to those who practise it in moderation, and may perhaps actually benefit the taro in so far as it causes, if possible, more attention to be paid to the plant and its cultivation.

As there are magical methods used for the benefit of the gardens there are others which may be used, clandestinely, to its detriment. There is a tale of a village whose gardens failed again and again, despite all the industry of the villagers. Discouraged and mystified they decide to leave a small boy to watch for the putative sorcerer. Concealed under a pile of firewood the little spy observes a *sovai*—a devil-devil—decked with leaves and grass come dancing into the garden. He is hideously skinny and ugly, and as he performs his ungainly dance he sings *Utu nauko, kobo nauko, ebu tungako*, 'Like my leg, like my arm, like the neck of a drum', meaning that the taro will be poor and shrivelled, like his own scrawny limbs, or the slender grip of the drum which he beats. This, like most native stories, has a happy ending. The villagers lie in wait, and on his next appearance the *sovai* is seized, dispatched, and cast into a deep water, after which the gardens prosper as they should.

Whenever things go wrong unexplicably the native is prone to impute his misfortunes to a sorcerer. No doubt sorcery is supposed to be practised a hundred times more often than it is really practised. But there is one rather cunning method which may serve as an example of black magic at work in the garden. When a man finds that a thief has been making free with his taro, sugar-cane, or whatever it may be, he will look about for some remains of the stolen food, and then setting upright in the ground a length of springy stick, he will hold this fragment of food against the upper end, and, bending the stick back, shoot it out of the garden as if by means of a catapult. The effect of this is to make the thief a waster,